

## 3300/39 Dual-channel Process Variable Monitor

### *Continuous monitoring of process variables*

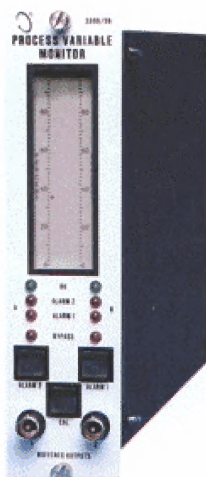
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**T**he mechanical behavior of rotating machinery is better understood when process variables, such as pressure, flow and load are monitored. The new Bently Nevada 3300/39 Dual-channel Process Variable Monitor does this from within the 3300 System Rack. Accurate process variable monitoring can now be consolidated with vibration, temperature and other parameters in a single location.

When process variable information is trended and correlated with vibration, position and temperature measurements, you can improve your evaluation of rotating machinery conditions. This information can help determine the effect the machine has on the process or the effect the process has on the machine.

Vibration and position characteristics of a machine can be affected by process changes and other factors external to the machine. By comparing a machine's dynamic parameters with process changes, you can obtain important machinery condition information. If you know how they relate to each other, you can optimize process conditions to minimize vibration and establish the most efficient operating conditions.

The 3300/39 Dual-channel Process Variable Monitor accepts industry standard transmitter signals of 4 to 20 mA or 1 to 5 Vdc. Because virtually all types of field transmitter signals can be used as inputs to the 3300/39, it is suitable for measuring most process variables on all types of machines. The transmitter used must be selected for the measured parameter and must be powered from an external source.



The monitor has a continuous display of two independent channels. Each channel has individual Alarm 1 and Alarm 2 settings and optional relays that can be programmed for over and under alarms. This flexibility enables you to tailor the alarm response to the process measured. When used with a Dynamic Data Manager<sup>®2</sup>/Transient Data Manager<sup>®2</sup> (DDM2/TDM2) System, the alarm outputs can help correlate vibration, position and temperature data with process parameter changes by "freezing" dynamic and static data.

The 3300/39 provides a cost-effective way to input process variables into a TDM/TDM2 database. Bently Nevada's advanced Engineer Assist<sup>™</sup> Software audits this database to determine the root cause of a machine malfunction. Process variable inputs make these audits more effective, providing Engineer Assist<sup>™</sup> users with more accurate, actionable information.

The 3300/39 provides these solutions to business problems:

- Process data can be stored in a TDM/TDM2 database for use with Engineer Assist<sup>™</sup> Software.

- Separate vibration monitoring and process variable information can be combined to save space and money.
- Continuous display and monitoring of process data for two separate channels.
- Alarms on changes in process variables on a per channel basis (individual relays and over/under alarms).
- Process variables can be trended on a computer. Standard Modbus or Allen-Bradley DF1 communications protocols are supported through the 3300 Serial Data Interface (SDI).
- Process variable inputs can be conveniently added to an existing 3300 Monitoring System by installing the 3300/39 into a spare rack position.
- Process data is communicated digitally, with the same time resolution as data from other 3300 monitors, to DDM2/TDM2 Software via Dynamic Data Interface (DDI)/Dynamic Data Interface External (DDIX)/Transient Data Manager (TDM)/Transient Data Interface External (TDIX) Communications Processors
- Process data has the same time-resolution and time/date stamps as data from other 3300 monitors when written in steady-state, startup/coastdown or fast-trend files by TDM/TDIX Communications Processors.
- Process data can be quickly correlated with all other data acquired by a 3300 Monitoring System in the DDM2/TDM2 database.
- Process data alarms can "freeze" (trigger automatic storage in Communications Processors) vibration, thrust, or temperature data to make correlation easy.
- Vibration/thrust/temperature alarms can "freeze" process data to make correlation easy.

Contact your nearest Bently Nevada sales representative for more information on the 3300/39 Dual-channel Process Variable Monitor. ■